

Exhibit 6 to Deposition of Jason D. Kennedy, M.D.

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TENNESSEE

DANIEL LOVELACE and
HELEN LOVELACE, Individually, and as Parents of
BRETT LOVELACE, deceased,

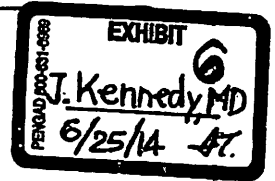
Plaintiffs,

vs.

NO.: 2:13-cv-02289 dky
JURY TRIAL DEMANDED

PEDIATRIC ANESTHESIOLOGISTS, P.A.;
BABU RAO PAIDIPALLI ; and MARK P. CLEMONS,

Defendants.



**PLAINTIFFS' DESIGNATION OF EXPERT WITNESSES
AND PHYSICIANS NOT EMPLOYED AS EXPERTS**

COME NOW the Plaintiffs, Daniel Lovelace and Helen Lovelace, individually, and as Parent of Brett Lovelace, deceased, by and through the undersigned counsel of record, pursuant to FRCP 26(a)(2)(B), and designate the following expert witnesses and treating physicians and provided herewith, the information necessary to comply with the aforesaid Rule:

1. The following person or persons may be used at trial to present evidence under Rules 701, 702, 703 or 705 of the Federal Rules of Evidence.

(A) Frank J. Peretti, M.D.
Forensic Pathologist
Arkansas State Crime Lab
3 Natural Resources Drive
Little Rock AR 72205
Ph: (501) 683-6122

- (i) Subject matter, facts and opinions, and summary of grounds: See Exhibit "A" attached hereto.
- (ii) Qualifications: See Exhibit "A" attached hereto.

The *subject matter* upon which these witnesses are expected to present evidence under Fed. R. Evid. 701, 703 or 705, includes the injuries received by Brett Lovelace in the subject accident that occurred on March 14, 2012. A summary of the facts and opinions of these witnesses follows:

- (A) Defendant, Mark P. Clemons, M.D.;
- (B) Defendant, Babu Rao Paidipalli;
- (C) Grace Freeman, CRNA, LeBonheur Staff;
- (D) Nurse Kelly Kish
5261 Jon Oak Drive
Arlington, TN 38002;
- (E) LeBonheur PACU Staff; and
- (F) LeBonheur ICU Staff; Dr. Mark Bugnitz and Nursing Staff

offer expert opinions at trial:

designated who are not retained to provide expert testimony but are expected to or may be called to

2. Doctors/Physicians: The following physicians, including Defendants, and nurses, are

- (i) Subject matter, facts and opinions, and summary of grounds: See Exhibit "C" attached hereto.
- (ii) Qualifications: See Exhibit "C" attached hereto.
- (C) Jason D. Kennedy, M.D.
204 Old Williamsburg Court
Nashville, TN 37215
Ph: (615) 484-5316
- (i) Subject matter, facts and opinions, and summary of grounds: See Exhibit "B" attached hereto.
- (ii) Qualifications: See Exhibit "B" attached hereto.
- (B) Robert E. "Jay" Marsh, C.P.A., C.F.A., P.E., J.D.
Marsh Economic Consulting, Inc.
Six Levant Drive
Little Rock, AR 72212-2658
Ph: (501) 821-6677

They treated Brett Lovelace; he suffered positional asphyxia in the PACU, following a routine tonsillectomy, and died due to the negligence of Defendants, and due to circumstances for which they have some or no explanation.

Respectfully submitted,

HALLIBURTON & LEDBETTER

/s/ Mark Ledbetter

MARK LEDBETTER AR# 74175
Attorney for Plaintiffs TN#17637
254 Court Avenue, Suite 305
Memphis, TN 38103
(901) 523-8153-phone
(901) 523-8115-fax

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing has been properly served upon the following counsel of record via E-Mail, this 9th day of April, 2014:

J. Kimbrough Johnson/Marcy Dodds Magee/Margaret Cooper
2900 One Commerce Square
40 S. Main Street
Memphis, TN 38103
Attorneys for Mark Clemons
901/525-8721-phone
901/525-6722-fax
jjohnson@lewisthomason.com
mmagee@lewisthomason.com
mcooper@lewisthomason.com

Albert G. McLean/David Cook/Jerry Potter/Brad Gilmer
The Hardison Law Firm
119 S. Main Street, Suite 800
Memphis, TN 38103
Attorneys for Babu R. Paidipalli & Pediatric Anesthesiologists, P.A.
901/525-8776 – phone
901/525-8790 – fax
amclean@hard-law.com

/s/ Mark Ledbetter

MARK LEDBETTER, Certifying Attorney

AUTOPSY REPORT

Case No: AR-17-12

Date of Examination: March 15, 2012

Name: LOVELACE, Brett

Age: 12 years

Race: White

Sex: Male

CONCLUSION

CAUSE OF DEATH:

Bronchopneumonia due to Anoxic Encephalopathy due to Positional Asphyxia While Under General Anesthesia for Elective Tonsillectomy and Adenoidectomy for Tonsillar and Adenoidal Hypertrophy with Upper Airway Obstruction.

CONTRIBUTORY FACTOR:

Obesity.

MANNER OF DEATH:

Accident.


Frank J. Peretti, M.D.
Forensic Pathologist

8-23-12/cak



Name: LOVELACE, Brett

Case No.: AR-17-12

EXTERNAL EXAMINATION

The body was that of a well developed, well nourished, obese, white male. The body weighed 189 pounds, was 68 inches in length and appeared compatible with the stated age of 12 years. The body was cold. Rigor mortis was relenting. Lividity was present and fixed on the posterior surface of the body except in areas exposed to pressure. The scalp hair was brown. The irides appeared to be hazel. The corneae were cloudy. The sclerae and conjunctivae showed no petechial hemorrhages. The external nares and oral cavity contained dried mucoid secretions. The teeth were natural and in good condition. Upper braces were in place. Examination of the neck revealed no evidence of injury. The chest was unremarkable. No evidence of injury of the ribs or the sternum was evident externally. The abdomen was soft and obese. The external genitalia were that of a normal child. The lower extremities showed a few old scars. The ankles and feet were clean. The upper extremities showed no injuries or abnormalities. The posterior surface of the body was unremarkable.

EVIDENCE OF MEDICAL ATTENTION:

There was evidence of a recent tonsillectomy.

Intravenous lines were present in the back of the hands and in the left antecubital fossa.

Hospital identification bracelets encircled the left wrist.

A Foley catheter was in place containing no urine.

Two intravenous lines were present on the right foot.

Intravenous lines were present in the back of both right and left hands.

A catheter was present in the right groin fold.

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EVIDENCE OF OLD INJURY:

None.

EVIDENCE OF RECENT INJURY:

A 1/2 inch blue contusion was present on the anterior surface of the right leg.

INTERNAL EXAMINATION

The subcutaneous fat layer measured up to 1 1/2 inches. No adhesions or abnormal collections of fluid were present in the body cavities. Petechiae were not present on the thoracic organs. All body organs were present in normal anatomic position and were congested. The thymus was identified and weighed 75 grams. There was no internal evidence of blunt force or penetrating injury to the thoracoabdominal region.

CARDIOVASCULAR SYSTEM:

The pericardial surfaces were smooth, glistening and unremarkable. The pericardial sac contained a few milliliters of clear serous fluid and there were no adhesions. The heart was normal in size, shape and configuration. The coronary arteries arose normally, followed the usual distribution and were widely patent. The chambers and valves exhibited the usual size-position relationship and were unremarkable. The myocardium was dark red-brown, firm and unremarkable. The atrial and ventricular septa were intact. The aorta and its major branches arose normally, followed the usual course and were widely patent. The vena cava and its major tributaries returned to the heart in the usual distribution and were free of thrombi. The heart weighed 300 grams.

RESPIRATORY SYSTEM:

The pleural surfaces were smooth and glistening. The pulmonary arteries were normally developed and patent. The upper and lower airways contained thick mucoid purulent secretions. The mucosal surfaces were hyperemic and unremarkable. The

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Case No.: AR-17-12

pulmonary parenchyma was not hyperinflated. The pulmonary parenchyma was grayish-purple. The lower lobe of the right lung was diffusely consolidated. The right lung weighed 775 grams; the left 525 grams.

NECK:

Examination of the soft tissues of the neck, including strap muscles, thyroid gland and large vessels, revealed no abnormalities or hemorrhage. The hyoid bone and larynx were intact. The epiglottis and vocal cords were hyperemic, but otherwise unremarkable. There was evidence of a recent tonsillectomy. The operative site showed no infection or hemorrhage.

ALIMENTARY TRACT:

The tongue, esophagus, stomach, small and large bowel, rectum and anus showed no lesions or abnormalities. The gastric mucosa was hyperemic and the lumen contained 50 ml of red mucus. The appendix was present.

LIVER AND BILIARY SYSTEM:

The hepatic parenchyma was maroonish-yellow with no focal lesions noted. The gallbladder contained 15 ml of serous/mucoid bile. The mucosa was unremarkable. The extrahepatic biliary tree was patent, without evidence of calculi. The liver weighed 2477 grams.

GENITOURINARY SYSTEM:

The cortical surfaces were red-brown and smooth. The cortex was unremarkable. The calyces, pelves and ureters were unremarkable. The urinary bladder was contracted and empty. The mucosa was gray-tan and smooth. Prostate and testes were unremarkable. The right kidney weighed 225 grams; the left 200 grams.

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RETICULOENDOTHELIAL SYSTEM:

The spleen had a smooth, intact capsule covering red-purple, moderately firm parenchyma. The hilar lymph nodes were enlarged. The spleen weighed 350 grams.

ENDOCRINE AND EXOCRINE SYSTEMS:

The pituitary, thyroid, adrenal glands and pancreas were free of obvious disease.

MUSCULOSKELETAL SYSTEM:

Muscles were red-brown and within normal development. No bone or joint abnormalities were noted. The cervical, thoracic, and lumbar spine showed no obvious old fractures or other abnormalities.

CENTRAL NERVOUS SYSTEM:

The scalp showed no edema or hemorrhage. The calvarium and base of the skull showed no fractures. The dura and falx cerebri were intact. There was no epidural, subdural or subarachnoid hemorrhage present. The leptomeninges were clear. The cerebral hemispheres were symmetric, diffusely congested and soft. The cranial nerves were intact. The circle of Willis and related blood vessels were normal in caliber and distribution. Sections through the cerebral hemispheres, brain stem and cerebellum revealed no focal lesions. Cerebellar tonsillar herniation was present. The spinal cord was not examined. The brain weighed 1425 grams.

HISTOLOGY:

Heart: No lesions. Focal areas of interstitial hemorrhage.

Thymus and pancreas: No lesions.

Adrenals and kidneys: Congestion. No lesions.

Name: LOVELACE, Brett

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Spleen and liver: No lesions.

Brain: Changes consistent with anoxic encephalopathy.

Lungs: Sections show diffuse bronchopneumonia. Postmortem bacterial overgrowth is present. The bronchioles show thickening of the basement membrane, edema with eosinophilic infiltrate, increased of the submucosal glands and hypertrophy of the bronchial wall muscle. Similar changes are seen in the trachea.

Name: LOVELACE, Brett

Case No.: AR-17-12

FINDINGS:

- I. Anoxic encephalopathy, clinical.
 - A. Cerebral edema, 1425 grams, with herniation.
 - B. Pneumonia.
 - C. Hilar lymphadenopathy.
- II. Status post tonsillectomy, March 12, 2012.
 - A. No evidence of hemorrhage or infection surrounding operative site.
 - B. No evidence of aspirated blood.
- III. Asthma, clinical.
 - A. No evidence of hyperinflation of lungs.
 - B. No evidence of mucus in terminal bronchi.
- IV. Obesity.

Name: LOVELACE, Brett

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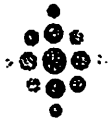
OPINION:

This 12-year-old white male, Brett Lovelace, died of bronchopneumonia due to anoxic encephalopathy due to positional asphyxia while under general anesthesia for elective tonsillectomy and adenoidectomy for tonsillar and adenoidal hypertrophy with upper airway obstruction with the contributory factor of obesity. Investigation of the circumstances of death revealed that the decedent's medical history was significant for asthma. He underwent an elective tonsillectomy and adenoidectomy at La Bonheur Hospital in Memphis, Tennessee, March 12, 2012. The surgery was without complications. Reportedly, according to his parents, when they arrived in the recovery room, "Brett was on his stomach and was still under the effects of general anesthesia. He could not breathe and turned blue". He was resuscitated, intubated and subsequently developed anoxic encephalopathy and died on March 14, 2012. His death was certified as "Cardiorespiratory Failure due to Tonsillar Herniation due to Anoxic Ischemic Encephalopathy". No manner of death was assigned.

Autopsy demonstrated the decedent had an obese body habitus for a 12-year-old. The operative site showed no evidence of infection or hemorrhage. There was no evidence of aspiration of blood into the tracheobronchial tree. The lungs were not hyperinflated at the time of autopsy. The right lung showed pneumonia and thick purulent mucoid secretions were present in the air passages, however, there was no evidence of mucus plugging involving the distal terminal bronchi. The brain showed diffuse anoxic changes with edema and herniation. Microscopic examination showed diffuse bronchopneumonia, anoxic changes of the brain and asthmatic changes involving the lungs. Toxicology detected no alcohol or drugs in the body fluids.

MANNER OF DEATH: Accident.


Frank J. Peretti, M.D.
Forensic Pathologist



AIT Laboratories
A HIGHER STANDARD OF SERVICE

2285 Executive Drive, Indianapolis, IN 46241
Telephone: (800)875-3894 / Fax: (317)243-2789

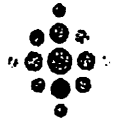
Laboratory Case Number: 1924527	Subject's Name: LOVELACE, BRETT
Client Account: 11359 / FJP01 Physician: Report To: Frank J. Peretti, MD ATTN: Frank J. Peretti, MD 4718 Sugar Maple Lane Little Rock, AR 72212-2092 FX: 1-501-223-0504	Agency Case #: AR017-12 ARKANSAS Date of Death: Not Given Test Reason: Other Investigator: NOT INDICATED Date Received: 03/20/2012 Date Reported: 03/28/2012

Laboratory Specimen No: 40274584	Date Collected:
Container(s): 01:RTB Blood, PERIPHERAL	Test(s): 70535 Drugs of Abuse Panel

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
» Investigator:	Not Provided				
» Pathologist:	Not Provided				
» Submitting Official:	Not Provided				
AMPHETAMINES	Negative				
BARBITURATES	Negative				
BENZODIAZEPINES	Negative				
CANNABINOIDS	Negative				
COCAINE/METABOLITES	Negative				
FENTANYL	Negative				
METHADONE/METABOLITE	Negative				
OPIATES	Negative				
OXYCODONE/METABOLITE	Negative				
PHENCYCLIDINE	Negative				
PROPOXYPHENE/METABOLITE	Negative				
SALICYLATES	Negative				
ALCOHOL	Negative				
Methanol	Negative				
Ethanol	Negative				
Acetone	Negative				
Isopropanol	Negative				
ANTIDEPRESSANTS	Negative				

Specimens will be kept for one year from the date received.

LOVELACE, BRETT
Laboratory Case #: 1924527
Printed Date/Time: 03/28/2012, 15:56



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Laboratory Specimen No: 40274584

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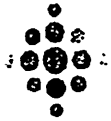
<u>Analyte Name</u>	<u>Result</u>	<u>Concentration</u>	<u>Units</u>	<u>Therapeutic Range</u>	<u>Loc</u>
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LOVELACE, BRETT

Laboratory Case #: 1924527

Printed Date/Time: 03/28/2012, 15:56

Page: 2 of 3



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2285 Executive Drive, Indianapolis, IN 46241
Telephone: (800)875-3894 / Fax: (317)243-2789

Laboratory Specimen No: 40274585
Container(s): 01:VIT_CON Vitreous,EYE

Date Collected:
Test(s): 70570 Autopsy Panel, Volatiles

Analyte Name	Result	Concentration	Units	Therapeutic Range	Loc
ALCOHOL	Negative				
Methanol	Negative				
Ethanol	Negative				
Acetone	Negative				
Isopropanol	Negative				

The Specimen Identified by the Laboratory Specimen Number has been handled and analyzed in accordance with all applicable requirements.

LOVELACE, BRETT

Laboratory Case #: 1924527

Printed Date/Time: 03/28/2012, 15:56

Page: 3 of 3

I hereby certify the above to be a true and correct copy of the original document on file in this department. This certified copy is valid only when printed on security paper showing the red embossed seal of the Department of Health. Alteration or erasure voids this certification.

[Signature]
Doris Gonn
Local Registrar
Shelby County

Date Issued: JUN 14 2017



CERTIFICATION OF VITAL RECORD



Health > Doctors > Frank Peretti, MD



Dr. Frank J Peretti MD
Pathologist

Dr. Frank Peretti is a pathologist in Little Rock, Arkansas and is affiliated with UAMS Medical Center. He received his medical degree from University of Milan Faculty of Medicine and has been in practice for 25 years. He is one of 7 doctors at UAMS Medical Center who specialize in Pathology.

Are you Dr. Frank Peretti? Claim your profile to make edits or add details. [Claim/Edit Profile](#)

[Doctor Overview](#) [Contact Information & Map](#)

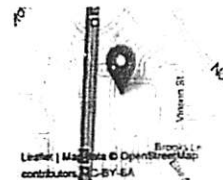
Specialty & Clinical Interests

Pathologist: Forensic/Autopsy

Hospital Affiliation

UAMS Medical Center

Office Location



[See Contact Information](#)

Education & Medical Training

Brown University Affil Hospitals

Residency, Anatomic and Clinical Pathology. 1986 - 1988

Miriam Hospital - Lifespan

Residency, Anatomic and Clinical Pathology. 1985 - 1986

Office Chief Medical Examiner (Baltimore MD)

Fellowship, Forensic Pathology. 1988 - 1989

University of Milan Faculty of Medicine

Class of 1984

Publications & Presentations

Histologic evidence of repetitive blunt force abdominal trauma in four pediatric fatalities.

Dye, D.W., Peretti, F.J., Kokes, C.P.

Brain vesicular acetylcholine transporter in human users of drugs of abuse.

Siegel, D., Erickson, J., Varoqui, H., Ang, L., Kalasinsky, K.S., Peretti, F.J., Aiken, S.S., Wickham, D.J., Kish, S.J.

Decreased striatal dopamine D1 receptor-stimulated adenylyl cyclase activity in human methamphetamine users.

Tong, J., Ross, B.M., Schmunk, G.A., Peretti, F.J., Kalasinsky, K.S., Furukawa, Y., Ang, L.C., Aiken, S.S., Wickham, D.J., Kish, S.J.

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PRELIMINARY DRAFT

**An Evaluation of Economic Losses
In the Case of
Brett Spencer Lovelace**

4/12

Marsh Economic Consulting, Inc.



Robert E. "Jay" Marsh, CPA, CFA, PE, JD
President

PRELIMINARY DRAFT

MARSH ECONOMIC CONSULTING, INC.



Brett Spencer Lovelace is a white male, born on August 21, 1999, who died on March 14, 2012, from alleged medical malpractice. His parents, Daniel and Helen Lovelace, and siblings, Steven, Curtis and Taylor, survive him. At the time of Brett's death, he and his family were living in West Memphis, Arkansas.

As a result of Brett's premature death, his estate will experience a loss of his earning capacity less personal maintenance. This report defines personal maintenance as living expenses that under Brett's standard of living would have been reasonably necessary to keep Brett in such a condition of health and well-being as to maintain the capacity to earn money. Food, clothing, transportation and personal care products are necessary costs of maintaining Brett in the labor force to earn the income that was lost. Both single and married deceased's shelter expenses are arguably also costs necessary to maintain the capacity to earn money. But including a married deceased's shelter expenses in personal maintenance would deny the surviving family members the money needed for continued living in the marital home. Because this is cannot be the intended result of the personal maintenance deduction and because the definition of personal maintenance does not differentiate between single and married decedents, shelter expenses are not included in personal maintenance in this report even though Brett is single.

Because the average white male participates in the labor force and is employed full-time, the mean earnings of the median white male assume 100% certainty of participation and full-time employment. On-the-other-hand, the mean earnings of all white males reflect the less than 50% possibility of not participating in the labor force, of not being employed

if participating in the labor force, and of not having a full-time job if employed. This report measures "earning capacity" based on the mean earnings of the median white male, and "expected value" based on the mean earnings of all white males.

The computation of the present cash value of the economic losses associated with Brett's death requires that certain assumptions be made. The assumptions must be reasonable and capable of being validated at the time of trial. In this report it has been assumed that: (1) Brett, but for his death, would have had either a high school diploma, some college but no degree, or a Bachelor's degree; (2) Brett would have entered the labor force on June 1, at either age 18.78 (high school), 19.78 (some college), or 22.78 (Bachelor's degree); (3) Brett would have continued in the labor force until retirement at age 67 or 70 (earning capacity), or alternatively continued in the labor force based on a work life probability distribution having an age expectancy value of either 56.61 (high school), 55.81 (some college) or 59.87 (Bachelor's degree) years as of March 14, 2012 (expected value); (4) Brett would have earned income consistent with either the full-time earnings of the median white male (earning capacity) or the average earnings of all white males (expected value) his same age and educational attainment; (5) Brett would have consumed some fraction of his earned income for his own personal maintenance; (6) Brett would have experienced either a 100% labor force participation rate (earning capacity) or the labor force participation rate of males his same age and education (expected value); (7) Brett would have experienced either a zero unemployment rate (earning capacity) or the unemployment rate of white males his same age (expected value); (8) Brett would have experienced the normal life expectancy to age 76.51 of a

white male his same age, and the normal survival and employment expectancy of a male his same age and education, and; (9) any financial recovery by Brett's estate will occur on or about May 1, 2005.

These nine assumptions imply particular values, probability distributions, divisions of time, and methodologies for calculating the present cash value of the economic losses resulting from Brett's death. The computation of the earning capacity present values of Brett's earnings net of personal maintenance with a high school diploma, some college but no degree, and a Bachelor's degree, are set out in Tables 1, 3 and 5, respectively. Some college, but no degree, is consistent with the educational attainment of average males in the United States, and high school and Bachelor's degree educational attainments establish a range around this average. The earnings values are based on five-year age interval statistics for full-time year-round white male workers. (The source for these statistics is the United States Department of Commerce, Census Bureau, Table PINC-04, Educational Attainment – People 18 Years Old and Over, by Total Money Earnings in 2010, Work Experience in 2010, Age, Race, white Origin and Sex.) These 2010 statistics are converted into current dollars, where inflation in 2012 is estimated at 2011's inflation rate of 3.16% per year. (The source for inflation as measured by the change in the all items consumer price index is the Economic Report of the President, February 2012, Table B-60.) Individual year values are derived from the distribution of the five-year age interval statistics using a third degree polynomial equation fitted to the statistics. The resulting year-to-year increase excludes cost of living adjustments and is the result of individual merit, productivity and work place advancement.

The personal maintenance factor is derived from the 2009 annual costs of food (\$3,460), apparel (\$975), transportation (\$4,182), and personal care products (\$345) as a percent of before tax income (\$32,780). The costs and income are for one person consumer units. (See US Department of Labor, Bureau of Labor Statistics, *Consumer Expenditure Survey, 2009*, Table 4.)

The survival factors are derived from the life tables for white males the same age as Brett. (See U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *United States Life Tables, 2007*, National Vital Statistics Reports, Volume 59, Number 9.)

A net discount rate of 2.41% was applied to adjusted annual earnings in determining the present value, where that rate assumes annual cost of living earnings increases of 3.69% based on the 1953 to 2011 average annual compounded change in the all items consumer price index, and interest of 6.19% based on the 1953 to 2011 average annual compounded yield on 10 year constant maturity U.S. Treasury securities. (See the Economic Report of the President, February 2012, Tables B-60 and B-73.)

The computation of the expected present values of Brett's earnings with a high school diploma, some college but no degree, and a Bachelor's degree, are set out in Tables 2, 4 and 6, respectively. The earnings values are based on five-year age interval statistics for

all white male workers, and not just those who work full-time year-round. The source for these statistics is the same as that in Table 1.

The survival and labor force participation factors for males with Brett's educational attainments are derived from work life tables. (See Skoog, Gary R., James E. Ciecka and Kurt V. Krueger, "*The Markov Process Model of Labor Force Activity: Extended Tables of Central Tendency, Shape, Percentile Points, and Bootstrap Standard Errors*", *Journal of Forensic Economics* 22(2), 2011, pp.165-229, which is an update to the U.S. Department of Labor, Bureau of Labor Statistics, *Worklife Estimates: Effects of Race and Education*, Bulletin 2254, February 1986, Table A-3.) The work lives are slightly adjusted downward to account for the fact that Brett would not have had a 100% certainty of living from age 12 to age 18.00.

The unemployment factors are derived from the average unemployment rates by age for white males from 1954 to 2011. (See United States Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, January 2012 and earlier years, Table 4.)

Future losses are in current dollars and defined as those that will occur between May 1, 2005, and age 67, 70, or work life expectancy. The formulas employed to calculate the present cash value of the economic loss associated with the death of Brett are standard, and may be found in many text books that deal with the mathematics of finance, and virtually all text books that deal with the mathematics of life insurance or the actuarial sciences. The same and similar formulas also are found in United States government

publications that deal with the estimation of lifetime earnings. (See, for example, United States Department of Commerce, Bureau of the Census, *Present Value of Estimated Lifetime Earnings*, Technical Paper No. 16.)

The schedule of losses in Table 7 summarizes the calculations of the present cash values of economic losses. The schedule is the maximum likelihood or best estimate of losses subject to the constraints and assumptions previously stated. To the extent that the economic loss should measure earning capacity and what Brett reasonably "could" have earned, a reliance on work life statistics, which include periods of labor force inactivity, may be inappropriate. Thus, the retirement at age 67 or 70 figures from Tables 1, 3 and 5 are a better measure of economic loss.

Table 1. Brett S. Lovelace - Present Value of High School Earnings Net Of Personal Maintenance Retirement at Age 67 or 70 - "Earning Capacity"

Beginning of Year Age	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.24%	Survival Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
12.69	0.00	\$0.00	1.000000	0.999873	\$0.00	0.978428	\$0.00	\$0.00
13.69	0.00	0.00	1.000000	0.999806	0.00	0.953413	0.00	0.00
14.69	0.00	0.00	1.000000	0.999202	0.00	0.930940	0.00	0.00
15.69	0.00	0.00	1.000000	0.998653	0.00	0.908997	0.00	0.00
16.69	0.00	0.00	1.000000	0.997963	0.00	0.887571	0.00	0.00
17.69	0.00	0.00	1.000000	0.997138	0.00	0.866850	0.00	0.00
18.69	0.82	25,062.04	0.726602	0.996180	16,615.06	0.846222	14,060.03	14,060.03
19.69	1.00	27,337.76	0.726602	0.995087	19,766.08	0.826276	16,332.22	30,392.25
20.69	1.00	29,509.63	0.726602	0.993861	21,310.11	0.806800	17,192.99	47,585.24
21.69	1.00	31,579.83	0.726602	0.992527	22,774.48	0.787783	17,941.34	65,526.58
22.69	1.00	33,550.49	0.726602	0.991133	24,161.68	0.769214	18,585.49	84,112.08
23.69	1.00	35,423.78	0.726602	0.989727	25,474.56	0.751083	19,133.50	103,245.57
24.69	1.00	37,201.83	0.726602	0.988349	26,715.97	0.733379	19,592.93	122,838.50
25.69	1.00	38,886.82	0.726602	0.987016	27,888.37	0.716092	19,970.64	142,809.14
26.69	1.00	40,480.88	0.726602	0.985723	28,993.55	0.699213	20,272.67	163,081.81
27.69	1.00	41,886.17	0.726602	0.984452	30,032.89	0.682732	20,504.41	183,586.22
28.69	1.00	43,404.84	0.726602	0.983185	31,007.73	0.666639	20,670.97	204,257.19
29.69	1.00	44,739.05	0.726602	0.981909	31,919.38	0.650926	20,777.15	225,034.33
30.69	1.00	45,990.95	0.726602	0.980614	32,769.27	0.635583	20,827.58	245,861.92
31.69	1.00	47,162.69	0.726602	0.979282	33,558.85	0.620601	20,826.67	266,688.59
32.69	1.00	48,256.41	0.726602	0.977937	34,289.59	0.605973	20,778.57	287,467.16
33.69	1.00	49,274.29	0.726602	0.976545	34,963.02	0.591880	20,687.26	308,154.41
34.69	1.00	50,218.45	0.726602	0.975104	35,580.40	0.577743	20,556.32	328,710.74
35.69	1.00	51,091.07	0.726602	0.973601	36,142.84	0.564125	20,389.08	349,099.82
36.69	1.00	51,894.29	0.726602	0.972020	36,651.45	0.550828	20,188.64	369,288.46
37.69	1.00	52,630.26	0.726602	0.970338	37,108.92	0.537844	19,957.75	389,246.21
38.69	1.00	53,301.14	0.726602	0.968528	37,509.80	0.525167	19,698.90	408,945.11
39.69	1.00	53,809.07	0.726602	0.966684	37,860.72	0.512788	19,414.52	428,359.63
40.69	1.00	54,456.22	0.726602	0.964429	38,160.49	0.500701	19,106.99	447,466.62
41.69	1.00	54,944.73	0.726602	0.962105	38,410.06	0.488899	18,778.64	466,245.27
42.69	1.00	55,376.75	0.726602	0.959574	38,610.21	0.477375	18,431.55	484,676.82
43.69	1.00	55,754.44	0.726602	0.956812	38,761.65	0.466123	18,067.69	502,744.50
44.69	1.00	56,079.95	0.726602	0.953803	38,866.34	0.455136	17,689.01	520,433.51
45.69	1.00	56,355.43	0.726602	0.950538	38,922.56	0.444408	17,297.49	537,731.01
46.69	1.00	56,583.04	0.726602	0.947004	38,934.50	0.433933	16,894.95	554,625.96
47.69	1.00	56,764.92	0.726602	0.943181	38,901.95	0.423704	16,482.93	571,108.88
48.69	1.00	56,903.23	0.726602	0.939035	38,825.33	0.413717	16,062.71	587,171.59
49.69	1.00	57,000.12	0.726602	0.934534	38,705.00	0.403885	15,635.48	602,807.07
50.69	1.00	57,057.75	0.726602	0.929850	38,541.67	0.394444	15,202.51	618,009.58
51.69	1.00	57,078.26	0.726602	0.924370	38,338.55	0.385146	14,765.17	632,774.76
52.69	1.00	57,063.81	0.726602	0.918697	38,091.60	0.376068	14,325.02	647,099.78
53.69	1.00	57,016.55	0.726602	0.912637	37,809.02	0.367203	13,883.60	660,983.38
54.69	1.00	56,938.63	0.726602	0.906187	37,490.49	0.358548	13,442.14	674,425.52

Table 1 (continued). Brett S. Lovelace - Present Value of High School Earnings Net Of Personal Maintenance Retirement at Age 67 or 70 - "Earning Capacity"

Beginning of Year Age	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.34%	Survival Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
55.69	1.00	56,832.21	0.726602	0.899328	37,137.19	0.350097	13,001.81	687,427.13
56.69	1.00	56,899.43	0.726602	0.892031	36,749.81	0.341845	12,562.72	699,989.85
57.69	1.00	56,542.46	0.726602	0.884257	36,328.65	0.333787	12,126.03	712,115.88
58.69	1.00	56,363.43	0.726602	0.875955	35,873.64	0.325919	11,691.91	723,807.79
59.69	1.00	56,164.51	0.726602	0.867074	35,384.61	0.318237	11,260.69	735,068.48
60.69	1.00	55,947.85	0.726602	0.857570	34,861.77	0.310738	10,832.60	745,901.28
61.69	1.00	55,715.60	0.726602	0.847403	34,305.46	0.303411	10,408.67	756,309.95
62.69	1.00	55,489.90	0.726602	0.836533	33,716.04	0.296260	9,988.70	766,298.65
63.69	1.00	55,212.92	0.726602	0.824912	33,093.65	0.289276	9,573.21	775,871.86
64.69	1.00	54,946.81	0.726602	0.812475	32,437.61	0.282458	9,162.26	785,034.12
65.69	1.00	54,673.71	0.726602	0.799154	31,747.18	0.275800	8,755.87	793,780.00
66.69	0.31	54,395.78	0.726602	0.784903	9,493.24	0.269289	2,556.52	796,346.52
66.69	1.00	54,395.78	0.726602	0.784903	31,022.56	0.269289	8,354.35	802,144.35
67.69	1.00	54,115.18	0.726602	0.769891	30,264.37	0.262952	7,958.06	810,102.41
68.69	1.00	53,834.05	0.726602	0.753478	29,472.99	0.256753	7,567.29	817,669.70
69.69	0.31	<u>53,711.54</u>	0.726602	0.736208	8,782.28	0.250702	2,204.24	819,873.94
70.69				0.717778				
71.69				0.698045				
72.69				0.678867				
73.69				0.654133				
74.69				0.629786				
75.69				0.603832				
76.69				0.576326				
77.69				0.547339				
78.69				0.516981				
79.69				0.485314				
80.69				0.452568				
81.69				0.418938				
82.69				0.384678				
83.69				0.350086				
84.69				0.315501				
85.69				0.281298				
86.69				0.247869				
87.69				0.215615				
88.69				0.184934				
89.69				0.156199				
90.69				0.129735				
91.69				0.105808				
92.69				0.084595				
93.69				0.066195				
94.69				0.050605				
95.69				0.037726				

Table 1 (continued). Brett S. Lovelace - Present Value of High School Earnings Net Of Personal Maintenance Retirement at Age 67 or 70 - "Earning Capacity"

Beginning of Year	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.34%	Survival Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
Age								
86.69				0.027372				
87.69				0.019288				
88.69				0.013169				
89.69				0.008873				
100.69				0.005483				
101.69				0.003327				
102.69				0.001941				
103.69				0.001087				
104.69				0.000582				
105.69				0.000298				
106.69				0.000145				
107.69				0.000067				
108.69				0.000029				
109.69				0.000011				
110.69				0.000002				
Avg 18 to 69		50,170.98						
Sum				63.815859				
Age at Death				12.662842				
Additional Years of LE								
Age 12.66 to 12.69				0.131135				
Age 12.69 to 110.00				63.815859				
Total				63.946994				
Life Expectancy at Death				76.509836				

Table 2. Brett S. Lovelace - Present Value of High School Earnings Net Of Personal Maintenance
Worklife - "Expected Value"

Beginning of Year	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.24%	Survival and Labor Force Participation Factor	Employment Factor	Total Adjusted Net Earnings (Current \$)	2.414009% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
12.69	0.00	\$0.00	1.000000	0.999873	0.000000	\$0.00	0.976429	\$0.00	\$0.00
13.69	0.00	0.00	1.000000	0.999608	0.000000	0.00	0.953413	0.00	0.00
14.69	0.00	0.00	1.000000	0.999202	0.000000	0.00	0.930940	0.00	0.00
15.69	0.00	0.00	1.000000	0.998853	0.000000	0.00	0.906997	0.00	0.00
16.69	0.00	0.00	1.000000	0.998013	0.825000	0.00	0.887571	0.00	0.00
17.69	0.00	0.00	1.000000	0.846636	0.825000	0.00	0.866650	0.00	0.00
18.69	0.92	16,824.48	0.726602	0.753054	0.861000	7,259.70	0.846222	6,143.32	6,143.32
19.69	1.00	18,051.20	0.726602	0.736388	0.861000	8,776.84	0.826276	7,251.93	13,395.25
20.69	1.00	21,203.40	0.726602	0.736635	0.913000	10,361.56	0.806800	8,358.70	21,754.95
21.69	1.00	23,281.03	0.726602	0.758469	0.913000	11,714.04	0.787783	9,228.12	30,983.07
22.69	1.00	25,284.01	0.726602	0.784422	0.913000	13,157.18	0.768214	10,120.69	41,103.76
23.69	1.00	27,212.28	0.726602	0.815532	0.913000	14,722.22	0.751083	11,057.60	52,161.36
24.69	1.00	29,085.78	0.726602	0.832369	0.913000	16,049.63	0.733378	11,770.45	63,931.82
25.69	1.00	30,844.43	0.726602	0.833842	0.953000	17,808.42	0.716082	12,753.19	76,685.00
26.69	1.00	32,548.17	0.726602	0.841527	0.953000	18,886.38	0.699213	13,291.53	89,948.53
27.69	1.00	34,176.93	0.726602	0.847274	0.953000	20,051.48	0.682732	13,689.77	103,638.31
28.69	1.00	35,730.65	0.726602	0.850649	0.953000	21,048.54	0.666839	14,030.45	117,668.76
29.69	1.00	37,209.26	0.726602	0.853476	0.953000	21,990.32	0.650926	14,314.07	131,980.82
30.69	1.00	38,612.70	0.726602	0.856574	0.953000	22,802.56	0.635583	14,558.48	146,537.30
31.69	1.00	39,940.89	0.726602	0.855076	0.953000	23,648.94	0.620601	14,676.57	161,213.88
32.69	1.00	41,193.78	0.726602	0.860727	0.953000	24,551.98	0.605873	14,877.83	176,091.69
33.69	1.00	42,371.29	0.726602	0.867540	0.953000	25,453.68	0.591690	15,060.67	191,152.36
34.69	1.00	43,473.37	0.726602	0.871185	0.953000	26,225.44	0.577743	15,151.58	206,303.92
35.69	1.00	44,499.94	0.726602	0.868665	0.964000	27,076.03	0.564125	15,274.28	221,578.19
36.69	1.00	45,450.93	0.726602	0.863633	0.964000	27,494.48	0.550828	15,144.72	236,722.90
37.69	1.00	46,326.29	0.726602	0.857428	0.964000	27,822.65	0.537844	14,964.26	251,687.16
38.69	1.00	47,125.94	0.726602	0.848545	0.964000	28,009.71	0.525167	14,708.77	266,396.92
39.69	1.00	47,849.82	0.726602	0.843694	0.964000	28,277.36	0.512788	14,500.29	280,897.21
40.69	1.00	48,497.87	0.726602	0.832609	0.964000	28,283.77	0.500701	14,161.71	295,058.93
41.69	1.00	49,070.01	0.726602	0.818714	0.964000	28,139.84	0.488889	13,757.54	308,816.48
42.69	1.00	49,586.18	0.726602	0.804725	0.964000	27,938.70	0.477375	13,337.24	322,153.70
43.69	1.00	49,986.31	0.726602	0.797453	0.964000	27,920.90	0.466123	13,014.57	335,168.26
44.69	1.00	50,330.34	0.726602	0.797105	0.964000	28,102.92	0.455136	12,760.64	347,928.92
45.69	1.00	50,598.21	0.726602	0.795666	0.965000	28,228.62	0.444408	12,545.02	360,503.94
46.69	1.00	50,789.84	0.726602	0.789387	0.965000	28,111.91	0.433633	12,196.68	372,702.62
47.69	1.00	50,905.17	0.726602	0.783058	0.965000	27,949.84	0.423704	11,842.47	384,545.09
48.69	1.00	50,944.13	0.726602	0.771316	0.965000	27,551.82	0.413717	11,398.68	395,943.75
49.69	1.00	50,906.66	0.726602	0.761729	0.965000	27,189.33	0.403965	10,983.55	406,927.30
50.69	1.00	50,792.68	0.726602	0.752316	0.965000	26,793.23	0.394444	10,568.42	417,495.72
51.69	1.00	50,602.15	0.726602	0.730047	0.965000	25,902.61	0.385146	9,978.29	427,472.00
52.69	1.00	50,334.98	0.726602	0.709433	0.965000	25,038.29	0.376068	9,416.09	436,888.10
53.69	1.00	49,991.11	0.726602	0.690955	0.965000	24,219.55	0.367203	8,893.50	445,781.60
54.69	1.00	49,570.48	0.726602	0.672692	0.965000	23,387.94	0.358548	8,385.70	454,167.30
55.69	1.00	49,073.01	0.726602	0.653713	0.963000	22,446.68	0.350097	7,858.51	462,025.81
56.69	1.00	48,498.85	0.726602	0.633170	0.963000	21,488.85	0.341845	7,345.16	469,370.97
57.69	1.00	47,847.33	0.726602	0.597273	0.963000	19,896.47	0.333787	6,674.56	476,045.53
58.69	1.00	47,118.98	0.726602	0.552459	0.963000	18,214.54	0.325919	5,936.47	481,982.00
59.69	1.00	46,313.53	0.726602	0.506133	0.963000	16,401.95	0.318237	5,219.71	487,201.71
60.69	1.00	45,430.82	0.726602	0.451867	0.963000	14,364.94	0.310736	4,463.70	491,665.41
61.69	1.00	44,471.08	0.726602	0.392075	0.963000	12,200.28	0.303411	3,701.70	495,367.11
62.69	1.00	43,433.95	0.726602	0.338965	0.963000	10,301.68	0.296260	3,051.97	498,419.07

Table 2 (continued). Brett S. Lovelace - Present Value of High School Earnings Net Of Personal Maintenance
Worklife - "Expected Value"

Beginning of Year	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor	Survival and Labor Force Participation Factor	Employment Factor	Total Adjusted Net Earnings (Current \$)	2.414006% Present Value	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
Age			27.34%						
63.69	1.00	42,319.45	0.726602	0.290938	0.963000	8,815.16	0.269276	2,492.16	500,911.24
64.69	1.00	41,127.54	0.726602	0.256208	0.963000	7,344.30	0.262458	2,074.46	502,985.69
65.69	1.00	39,858.12	0.726602	0.234105	0.965000	6,542.62	0.275800	1,804.45	504,790.15
66.69	1.00	38,511.15	0.726602	0.218511	0.965000	5,848.43	0.269289	1,574.44	506,364.59
67.69	1.00	37,088.55	0.726602	0.201023	0.965000	5,227.39	0.262952	1,374.55	507,739.13
68.69	1.00	35,584.28	0.726602	0.185457	0.965000	4,876.77	0.256753	1,252.13	508,991.26
69.69	1.00	34,903.10	0.726602	0.179630	0.965000	4,398.09	0.250702	1,102.11	510,093.37
70.69	1.00	34,903.10	0.726602	0.159306	0.965000	3,886.70	0.244792	854.37	511,047.74
71.69	1.00	34,903.10	0.726602	0.163022	0.965000	3,744.90	0.239022	895.11	511,942.86
72.69	1.00	34,903.10	0.726602	0.174036	0.965000	4,259.18	0.233368	894.04	512,836.90
73.69	1.00	34,903.10	0.726602	0.303614	0.965000	7,435.25	0.227687	1,694.40	514,531.29
74.69	1.00	34,903.10	0.726602	0.973485	0.965000	23,823.64	0.222515	5,301.13	519,832.42
75.69	1.00	34,903.10	0.726602	0.772022	0.965000	18,893.72	0.217271	4,105.05	524,037.47
76.69	1.00	<u>34,903.10</u>	0.726602	<u>0.115737</u>	0.965000	2,832.43	0.212149	600.80	524,638.37
Avg 18 to 69		41,610.39							
Sum				43.918100					
Age				<u>12.693989</u>					
Worklife				56.812089					

**Table 3. Brett S. Lovelace - Present Value of Some College Earnings Net Of Personal Maintenance
Retirement at Age 67 or 70 - "Earning Capacity"**

Beginning of Year Age	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.34%	Survival Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
12.69	0.00	\$0.00	1.000000	0.999873	\$0.00	0.976429	\$0.00	\$0.00
13.69	0.00	0.00	1.000000	0.999806	0.00	0.953413	0.00	0.00
14.69	0.00	0.00	1.000000	0.998202	0.00	0.930940	0.00	0.00
15.69	0.00	0.00	1.000000	0.998853	0.00	0.908997	0.00	0.00
16.69	0.00	0.00	1.000000	0.997963	0.00	0.887571	0.00	0.00
17.69	0.00	0.00	1.000000	0.997138	0.00	0.866650	0.00	0.00
18.69	0.00	27,255.95	0.726602	0.996180	0.00	0.846222	0.00	0.00
19.69	0.92	29,506.94	0.726602	0.995087	19,540.37	0.826276	16,145.74	16,145.74
20.69	1.00	31,676.84	0.726602	0.993861	22,875.13	0.806800	18,455.65	34,601.39
21.69	1.00	33,766.65	0.726602	0.992527	24,351.56	0.787783	19,183.73	53,785.12
22.69	1.00	35,777.41	0.726602	0.991133	25,765.41	0.769214	19,819.11	73,604.23
23.69	1.00	37,710.12	0.726602	0.989727	27,118.76	0.751083	20,368.42	93,972.65
24.69	1.00	39,565.81	0.726602	0.988349	28,413.63	0.733379	20,837.95	114,810.60
25.69	1.00	41,345.50	0.726602	0.987016	29,651.65	0.716092	21,233.32	136,043.92
26.69	1.00	43,050.20	0.726602	0.985723	30,833.76	0.699213	21,559.37	157,603.29
27.69	1.00	44,680.93	0.726602	0.984452	31,960.47	0.682732	21,820.43	179,423.72
28.69	1.00	46,238.71	0.726602	0.983185	33,032.20	0.666639	22,020.56	201,444.28
29.69	1.00	47,724.57	0.726602	0.981909	34,049.41	0.650926	22,163.64	223,607.92
30.69	1.00	49,139.51	0.726602	0.980614	35,012.67	0.635583	22,253.45	245,861.37
31.69	1.00	50,484.56	0.726602	0.979292	35,922.55	0.620601	22,293.58	268,154.95
32.69	1.00	51,760.73	0.726602	0.977937	36,779.65	0.605973	22,287.48	290,442.43
33.69	1.00	52,969.05	0.726602	0.976545	37,584.67	0.591680	22,238.46	312,680.89
34.69	1.00	54,110.53	0.726602	0.975104	38,337.98	0.577743	22,149.50	334,830.39
35.69	1.00	55,186.19	0.726602	0.973601	39,039.82	0.564125	22,023.33	356,853.73
36.69	1.00	56,197.06	0.726602	0.972020	39,680.37	0.550828	21,862.57	378,716.29
37.69	1.00	57,144.14	0.726602	0.970338	40,289.43	0.537844	21,669.44	400,385.73
38.69	1.00	58,028.46	0.726602	0.968528	40,836.58	0.525167	21,446.01	421,831.74
39.69	1.00	58,851.03	0.726602	0.966564	41,331.49	0.512788	21,194.29	443,026.03
40.69	1.00	59,612.88	0.726602	0.964429	41,774.04	0.500701	20,916.31	463,942.34
41.69	1.00	60,315.02	0.726602	0.962105	42,164.26	0.488899	20,614.06	484,556.40
42.69	1.00	60,958.47	0.726602	0.959574	42,501.94	0.477376	20,289.37	504,845.77
43.69	1.00	61,544.26	0.726602	0.956812	42,786.84	0.466123	19,943.93	524,789.69
44.69	1.00	62,073.39	0.726602	0.953803	43,019.00	0.455138	19,579.49	544,369.18
45.69	1.00	62,546.89	0.726602	0.950538	43,198.77	0.444408	19,197.87	563,567.05
46.69	1.00	62,965.77	0.726602	0.947004	43,326.43	0.433933	18,800.75	582,367.80
47.69	1.00	63,331.06	0.726602	0.943181	43,401.83	0.423704	18,389.55	600,757.35
48.69	1.00	63,643.77	0.726602	0.938035	43,424.43	0.413717	17,965.44	618,722.76
49.69	1.00	63,904.93	0.726602	0.934534	43,393.59	0.403965	17,529.51	636,252.29
50.69	1.00	64,115.64	0.726602	0.929850	43,309.10	0.394444	17,083.00	653,335.29
51.69	1.00	64,276.64	0.726602	0.924370	43,171.33	0.385146	16,627.27	669,962.56
52.69	1.00	64,389.23	0.726602	0.918697	42,981.51	0.376068	16,163.96	686,126.52
53.69	1.00	64,454.33	0.726602	0.912637	42,741.19	0.367203	15,694.71	701,821.23
54.69	1.00	64,472.98	0.726602	0.906187	42,451.38	0.358548	15,220.86	717,042.09

Table 3 (continued). Brett S. Lovelace - Present Value of Some College Earnings Net Of Personal Maintenance Retirement at Age 67 or 70 - "Earning Capacity"

Beginning of Year Age	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.34%	Survival Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
55.69	1.00	64,448.17	0.726602	0.899328	42,112.56	0.350097	14,743.47	731,785.56
56.69	1.00	64,374.94	0.726602	0.892031	41,724.70	0.341845	14,263.36	746,048.92
57.69	1.00	64,260.29	0.726602	0.884257	41,287.38	0.333787	13,781.19	759,830.11
58.69	1.00	64,103.26	0.726602	0.875955	40,799.80	0.325919	13,297.44	773,127.55
59.69	1.00	63,904.85	0.726602	0.867074	40,261.16	0.318237	12,812.59	785,940.13
60.69	1.00	63,666.09	0.726602	0.857670	39,671.10	0.310736	12,327.23	798,267.36
61.69	1.00	63,388.00	0.726602	0.847403	39,029.55	0.303411	11,842.01	810,109.37
62.69	1.00	63,071.59	0.726602	0.836533	38,336.54	0.296280	11,357.57	821,466.94
63.69	1.00	62,717.88	0.726602	0.824912	37,591.98	0.289276	10,874.48	832,341.42
64.69	1.00	62,327.89	0.726602	0.812475	36,795.00	0.282458	10,393.04	842,734.46
65.69	1.00	61,902.64	0.726602	0.799154	35,944.77	0.275800	9,913.57	852,648.03
66.69	0.31	61,443.15	0.726602	0.784903	10,723.16	0.269299	2,887.74	855,535.77
66.69	1.00	61,443.15	0.726602	0.784903	35,041.75	0.269299	9,436.72	862,084.76
67.69	1.00	60,950.43	0.726602	0.769691	34,087.04	0.262952	8,983.24	871,047.99
68.69	1.00	60,425.51	0.726602	0.753478	33,081.68	0.256753	8,493.84	879,541.82
69.69	0.31	60,188.18	0.726602	0.736208	9,852.15	0.250702	2,469.95	882,011.77
Avg 18 to 69		55,498.94						

Table 4. Brett S. Lovelace - Present Value of Some College Earnings Net Of Personal Maintenance
Worldwide - "Expected Value"

Beginning of Year	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.24%	Survival and Labor Force Participation Factor	Employment Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
12.69	0.00	\$0.00	1.000000	0.899873	0.000000	\$0.00	0.976429	\$0.00	\$0.00
13.69	0.00	0.00	1.000000	0.899608	0.000000	0.00	0.953413	0.00	0.00
14.69	0.00	0.00	1.000000	0.962642	0.000000	0.00	0.930940	0.00	0.00
15.69	0.00	0.00	1.000000	0.893525	0.000000	0.00	0.906997	0.00	0.00
16.69	0.00	0.00	1.000000	0.829758	0.825000	0.00	0.887571	0.00	0.00
17.69	0.00	0.00	1.000000	0.815697	0.825000	0.00	0.868650	0.00	0.00
18.69	0.00	10,737.92	0.726602	0.882824	0.891000	0.00	0.846222	0.00	0.00
19.69	0.92	13,545.63	0.726602	0.883956	0.891000	5,308.68	0.828276	4,388.35	4,388.35
20.69	1.00	16,258.44	0.726602	0.895040	0.913000	7,498.48	0.808800	6,048.14	10,434.49
21.69	1.00	18,876.39	0.726602	0.730892	0.913000	9,162.49	0.787783	7,210.17	17,644.66
22.69	1.00	21,399.53	0.726602	0.758330	0.913000	10,765.39	0.768214	8,280.88	25,925.55
23.69	1.00	23,827.89	0.726602	0.782535	0.913000	12,369.63	0.751063	9,280.61	35,216.16
24.69	1.00	26,161.53	0.726602	0.814784	0.913000	14,140.77	0.733379	10,370.54	45,586.70
25.69	1.00	28,400.49	0.726602	0.848354	0.953000	16,683.70	0.716092	11,947.06	57,533.76
26.69	1.00	30,544.81	0.726602	0.866313	0.953000	18,323.21	0.698213	12,811.83	70,345.59
27.69	1.00	32,594.54	0.726602	0.872900	0.953000	19,701.48	0.682732	13,450.82	83,796.40
28.69	1.00	34,549.71	0.726602	0.876029	0.953000	20,858.11	0.668639	13,871.49	97,767.89
29.69	1.00	36,410.39	0.726602	0.865063	0.953000	22,314.57	0.650928	14,525.13	112,293.03
30.69	1.00	38,176.60	0.726602	0.891629	0.953000	23,670.60	0.635583	14,981.06	127,274.09
31.69	1.00	39,848.39	0.726602	0.894133	0.953000	24,871.88	0.620601	15,311.41	142,585.50
32.69	1.00	41,425.81	0.726602	0.886489	0.953000	26,429.25	0.605973	15,409.45	157,994.94
33.69	1.00	42,908.91	0.726602	0.883730	0.953000	26,257.69	0.591690	15,536.40	173,531.35
34.69	1.00	44,297.72	0.726602	0.891048	0.953000	27,332.02	0.577743	15,790.88	189,322.23
35.69	1.00	45,592.28	0.726602	0.888484	0.964000	28,373.59	0.564125	16,008.25	205,328.48
36.69	1.00	46,792.66	0.726602	0.884122	0.964000	28,977.87	0.550828	15,961.71	221,290.18
37.69	1.00	47,898.88	0.726602	0.882450	0.964000	29,606.63	0.537844	15,923.76	237,213.94
38.69	1.00	48,910.99	0.726602	0.872608	0.964000	29,695.02	0.525167	15,889.87	252,913.81
39.69	1.00	49,829.04	0.726602	0.869284	0.964000	30,340.14	0.512768	15,558.06	268,471.87
40.69	1.00	50,653.07	0.726602	0.861772	0.964000	30,575.36	0.500701	15,308.11	283,780.99
41.69	1.00	51,383.13	0.726602	0.847754	0.964000	30,511.52	0.488899	14,917.05	298,698.04
42.69	1.00	52,019.26	0.726602	0.832922	0.964000	30,348.81	0.477376	14,487.77	313,185.81
43.69	1.00	52,581.49	0.726602	0.818578	0.964000	30,173.90	0.466123	14,084.74	327,260.55
44.69	1.00	53,009.89	0.726602	0.810332	0.964000	30,088.00	0.455136	13,694.13	340,944.68
45.69	1.00	53,364.49	0.726602	0.805130	0.965000	30,128.04	0.444408	13,388.25	354,332.93
46.69	1.00	53,625.33	0.726602	0.796694	0.965000	29,956.08	0.433833	12,998.82	367,331.85
47.69	1.00	53,782.47	0.726602	0.775583	0.965000	29,253.18	0.423704	12,394.70	379,726.55
48.69	1.00	53,865.93	0.726602	0.757620	0.965000	28,614.71	0.413717	11,838.40	391,564.94
49.69	1.00	53,845.78	0.726602	0.745282	0.965000	28,137.44	0.403985	11,368.55	402,933.50
50.69	1.00	53,732.05	0.726602	0.723741	0.965000	27,267.19	0.394444	10,755.37	413,688.87
51.69	1.00	53,524.78	0.726602	0.703493	0.965000	26,402.10	0.385146	10,168.67	423,856.53
52.69	1.00	53,224.03	0.726602	0.679565	0.965000	25,380.78	0.376068	9,537.37	433,392.91
53.69	1.00	52,829.83	0.726602	0.649635	0.965000	24,084.24	0.367203	8,896.47	442,229.38
54.69	1.00	52,342.23	0.726602	0.629444	0.965000	23,101.12	0.358548	8,282.86	450,512.24
55.69	1.00	51,761.28	0.726602	0.615255	0.963000	22,283.46	0.350087	7,601.37	458,313.61
56.69	1.00	51,087.01	0.726602	0.595324	0.963000	21,280.73	0.341845	7,274.70	465,588.31
57.69	1.00	50,319.47	0.726602	0.567139	0.963000	19,968.63	0.333787	6,665.27	472,253.58
58.69	1.00	49,458.71	0.726602	0.535798	0.963000	18,542.44	0.326919	6,043.34	478,296.91
59.69	1.00	48,504.77	0.726602	0.504853	0.963000	17,127.73	0.318237	5,450.68	483,747.59
60.69	1.00	47,457.70	0.726602	0.471804	0.963000	15,667.19	0.310738	4,868.36	488,615.95
61.69	1.00	46,317.53	0.726602	0.426082	0.963000	13,808.96	0.303411	4,189.80	492,805.74
62.69	1.00	45,084.31	0.726602	0.377893	0.963000	11,924.29	0.296260	3,632.68	496,398.43

**Table 4 (continued). Brett S. Lovelace - Present Value of Some College Earnings Not Of Personal Maintenance
Worklife - "Expected Value"**

Beginning of Year	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.24%	Survival and Labor Force Participation Factor	Employment Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
63.69	1.00	43,758.10	0.726602	0.348755	0.963000	10,678.27	0.289278	3,088.97	499,427.40
64.69	1.00	42,338.92	0.726602	0.336448	0.963000	9,967.35	0.282458	2,815.38	502,242.78
65.69	1.00	40,826.63	0.726602	0.318501	0.965000	9,060.35	0.275800	2,498.85	504,741.60
66.69	1.00	39,221.87	0.726602	0.283433	0.965000	7,784.76	0.269289	2,099.12	506,840.73
67.69	1.00	37,524.08	0.726602	0.251848	0.965000	6,821.04	0.262862	1,741.01	508,581.74
68.69	1.00	35,733.61	0.726602	0.244665	0.965000	6,130.16	0.256753	1,573.94	510,155.68
69.69	1.00	34,921.61	0.726602	0.246806	0.965000	6,038.39	0.250702	1,513.83	511,669.51
70.69	1.00	34,921.61	0.726602	0.219584	0.965000	5,376.74	0.244782	1,318.19	512,985.70
71.69	1.00	34,921.61	0.726602	0.188008	0.965000	4,603.58	0.239022	1,100.36	514,088.06
72.69	1.00	34,921.61	0.726602	0.174636	0.965000	4,276.14	0.233388	998.00	515,084.06
73.69	1.00	34,921.61	0.726602	0.241855	0.965000	5,822.06	0.227887	1,349.66	516,433.61
74.69	1.00	34,921.61	0.726602	0.601350	0.965000	19,621.85	0.222515	4,366.16	520,799.78
75.69	1.00	34,921.61	0.726602	0.670708	0.965000	16,422.98	0.217271	3,568.23	524,368.00
76.69	1.00	34,921.61	0.726602	0.115737	0.965000	2,833.93	0.212149	601.22	524,969.22
Avg 18 to 69		42,251.50							
Sum				43.114708					
Age				12.893989					
Worklife				55.608697					

Table 5. Brett S. Lovelace - Present Value of Bachelor Degree Earnings Net Of Personal Maintenance Retirement at Age 67 or 70 - "Earning Capacity"

Beginning of Year Age	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.34%	Survival Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
12.69	0.00	\$0.00	1.000000	0.999873	\$0.00	0.976429	\$0.00	\$0.00
13.69	0.00	0.00	1.000000	0.999606	0.00	0.953413	0.00	0.00
14.69	0.00	0.00	1.000000	0.999202	0.00	0.930940	0.00	0.00
15.69	0.00	0.00	1.000000	0.998653	0.00	0.908997	0.00	0.00
16.69	0.00	0.00	1.000000	0.997963	0.00	0.887571	0.00	0.00
17.69	0.00	0.00	1.000000	0.997138	0.00	0.866650	0.00	0.00
18.69	0.00	40,067.19	0.726602	0.996180	0.00	0.846222	0.00	0.00
19.69	0.00	43,424.75	0.726602	0.995087	0.00	0.826276	0.00	0.00
20.69	0.00	46,738.40	0.726602	0.993861	0.00	0.806800	0.00	0.00
21.69	0.00	50,004.14	0.726602	0.992527	0.00	0.787783	0.00	0.00
22.69	0.92	53,218.01	0.726602	0.991133	35,102.52	0.769214	27,001.34	27,001.34
23.69	1.00	56,376.02	0.726602	0.989727	40,542.10	0.751083	30,450.46	57,451.80
24.69	1.00	59,474.20	0.726602	0.988349	42,710.56	0.733379	31,323.01	88,774.81
25.69	1.00	62,508.57	0.726602	0.987016	44,829.12	0.716092	32,101.78	120,876.60
26.69	1.00	65,475.15	0.726602	0.985723	46,895.15	0.699213	32,789.70	153,666.30
27.69	1.00	68,369.96	0.726602	0.984452	48,905.34	0.682732	33,389.23	187,055.53
28.69	1.00	71,189.03	0.726602	0.983185	50,856.31	0.666639	33,902.81	220,958.34
29.69	1.00	73,928.38	0.726602	0.981909	52,744.70	0.650926	34,332.89	255,291.22
30.69	1.00	76,584.04	0.726602	0.980614	54,567.32	0.635583	34,682.05	289,973.27
31.69	1.00	79,152.02	0.726602	0.979292	56,321.03	0.620601	34,952.91	324,926.18
32.69	1.00	81,628.35	0.726602	0.977937	58,002.70	0.605973	35,148.08	360,074.26
33.69	1.00	84,009.05	0.726602	0.976545	59,609.38	0.591690	35,270.26	395,344.52
34.69	1.00	86,290.14	0.726602	0.975104	61,137.63	0.577743	35,321.84	430,666.36
35.69	1.00	88,467.65	0.726602	0.973601	62,583.78	0.564125	35,305.07	465,971.43
36.69	1.00	90,537.59	0.726602	0.972020	63,944.12	0.550828	35,222.20	501,193.63
37.69	1.00	92,496.00	0.726602	0.970338	65,214.23	0.537844	35,075.10	536,268.74
38.69	1.00	94,338.89	0.726602	0.968528	66,389.45	0.525167	34,865.53	571,134.27
39.69	1.00	96,062.29	0.726602	0.966664	67,465.21	0.512788	34,595.35	605,729.62
40.69	1.00	97,662.22	0.726602	0.964429	68,437.32	0.500701	34,266.64	639,996.26
41.69	1.00	99,134.70	0.726602	0.962105	69,301.83	0.488889	33,881.59	673,877.85
42.69	1.00	100,475.76	0.726602	0.959574	70,054.48	0.477375	33,442.27	707,320.12
43.69	1.00	101,681.40	0.726602	0.956812	70,691.02	0.466123	32,950.70	740,270.82
44.69	1.00	102,747.68	0.726602	0.953803	71,207.69	0.455136	32,409.17	772,679.99
45.69	1.00	103,670.59	0.726602	0.950538	71,601.35	0.444408	31,820.20	804,500.19
46.69	1.00	104,446.17	0.726602	0.947004	71,868.88	0.433933	31,186.25	835,686.44
47.69	1.00	105,070.43	0.726602	0.943181	72,006.52	0.423704	30,509.48	866,195.92
48.69	1.00	105,539.41	0.726602	0.939035	72,010.01	0.413717	29,791.78	895,987.70
49.69	1.00	105,849.12	0.726602	0.934534	71,875.10	0.403965	29,035.06	925,022.76
50.69	1.00	105,995.58	0.726602	0.929650	71,598.45	0.394444	28,241.55	953,264.30
51.69	1.00	105,974.82	0.726602	0.924370	71,177.86	0.385146	27,413.88	980,678.18
52.69	1.00	105,782.86	0.726602	0.918697	70,612.85	0.376068	26,555.22	1,007,233.40
53.69	1.00	105,415.73	0.726602	0.912837	69,903.66	0.367203	25,688.86	1,032,902.26
54.69	1.00	104,869.44	0.726602	0.906187	69,049.90	0.358548	24,757.71	1,057,659.97

Table 5 (continued). Brett S. Lovelace - Present Value of Bachelor Degree Earnings Net Of Personal Maintenance Retirement at Age 67 or 70 - "Earning Capacity"

Beginning of Year Age	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.34%	Survival Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
55.69	1.00	104,140.02	0.726602	0.899328	68,050.63	0.360097	23,824.30	1,081,484.27
56.69	1.00	103,223.49	0.726602	0.892031	68,904.44	0.341845	22,870.92	1,104,355.19
57.69	1.00	102,115.88	0.726602	0.884257	65,609.68	0.333787	21,899.65	1,126,254.84
58.69	1.00	100,813.20	0.726602	0.875955	64,164.68	0.325919	20,912.47	1,147,167.31
59.69	1.00	99,311.48	0.726602	0.867074	62,567.94	0.318237	19,911.43	1,167,078.74
60.69	1.00	97,806.74	0.726602	0.857570	60,819.92	0.310736	18,898.92	1,185,977.66
61.69	1.00	95,895.01	0.726602	0.847403	58,921.77	0.303411	17,877.54	1,203,855.20
62.69	1.00	93,572.31	0.726602	0.838533	56,875.67	0.296280	16,849.97	1,220,705.17
63.69	1.00	91,234.65	0.726602	0.824912	54,684.43	0.289276	15,818.92	1,236,524.09
64.69	1.00	88,878.07	0.726602	0.812475	52,350.71	0.282458	14,788.97	1,251,310.96
65.69	1.00	85,898.58	0.726602	0.799154	49,878.40	0.275800	13,756.47	1,265,067.43
66.69	0.31	82,892.21	0.726602	0.784903	14,486.49	0.269299	3,895.81	1,268,963.24
68.69	1.00	82,892.21	0.726602	0.784903	47,274.41	0.269299	12,730.96	1,277,798.39
67.69	1.00	79,654.88	0.726602	0.768891	44,547.71	0.262952	11,713.89	1,289,512.28
68.69	1.00	76,182.91	0.726602	0.753478	41,708.52	0.256753	10,708.81	1,300,221.08
69.69	0.31	<u>74,590.28</u>	0.726602	0.736208	12,210.02	0.260702	3,061.07	1,303,282.15
Avg 18 to 69		86,351.26						

**Table 6. Brett S. Lovelace - Present Value of Bachelor Degree Earnings Net Of Personal Maintenance
Worklife - "Expected Value"**

Beginning of Year	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.34%	Survival and Labor Force Participation Factor	Employment Factor	Total Adjusted Net Earnings (Current \$)	2.414006% Present Value Factor	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
12.69	0.00	\$0.00	1.000000	0.999873	0.000000	\$0.00	0.976429	\$0.00	\$0.00
13.69	0.00	0.00	1.000000	0.999608	0.000000	0.00	0.953413	0.00	0.00
14.69	0.00	0.00	1.000000	0.999202	0.000000	0.00	0.930940	0.00	0.00
15.69	0.00	0.00	1.000000	0.998853	0.000000	0.00	0.908997	0.00	0.00
16.69	0.00	0.00	1.000000	0.997963	0.825000	0.00	0.887671	0.00	0.00
17.69	0.00	0.00	1.000000	0.997138	0.825000	0.00	0.866660	0.00	0.00
18.69	0.00	31,348.84	0.726602	0.995957	0.861000	0.00	0.846222	0.00	0.00
19.69	0.00	35,176.70	0.726602	0.763239	0.861000	0.00	0.826276	0.00	0.00
20.69	0.00	38,923.48	0.726602	0.691151	0.913000	0.00	0.806800	0.00	0.00
21.69	0.00	42,583.87	0.726602	0.789581	0.913000	0.00	0.787783	0.00	0.00
22.69	0.82	48,154.75	0.726602	0.808072	0.913000	22,661.30	0.769214	17,431.38	17,431.38
23.69	1.00	49,633.02	0.726602	0.827879	0.913000	27,258.68	0.751063	20,473.60	37,904.88
24.69	1.00	53,015.68	0.726602	0.896691	0.913000	30,481.39	0.733379	22,354.40	60,259.28
25.69	1.00	56,269.27	0.726602	0.894828	0.953000	34,876.64	0.716092	24,974.89	85,234.18
26.69	1.00	59,481.03	0.726602	0.908858	0.953000	37,425.54	0.699213	26,168.43	111,402.61
27.69	1.00	62,557.72	0.726602	0.918565	0.953000	39,703.91	0.682732	27,107.13	138,509.73
28.69	1.00	65,526.24	0.726602	0.929604	0.953000	42,179.69	0.666839	28,118.57	166,628.30
29.69	1.00	68,383.48	0.726602	0.940642	0.953000	44,541.49	0.650926	28,893.20	195,521.50
30.69	1.00	71,126.32	0.726602	0.942667	0.953000	46,427.78	0.635583	29,508.68	225,030.19
31.69	1.00	73,751.65	0.726602	0.941204	0.953000	48,086.76	0.620601	29,830.29	254,860.47
32.69	1.00	76,256.36	0.726602	0.939747	0.953000	49,622.21	0.605973	30,069.73	285,030.20
33.69	1.00	78,637.34	0.726602	0.939010	0.953000	51,131.49	0.591680	30,263.68	315,284.18
34.69	1.00	80,891.47	0.726602	0.942580	0.953000	52,787.14	0.577743	30,503.18	345,787.36
35.69	1.00	83,015.66	0.726602	0.939275	0.964000	54,616.78	0.564125	30,810.69	376,598.05
36.69	1.00	85,006.77	0.726602	0.929612	0.964000	55,351.38	0.550828	30,489.08	407,087.13
37.69	1.00	86,861.70	0.726602	0.928452	0.964000	56,368.98	0.537844	30,316.68	437,403.79
38.69	1.00	88,577.35	0.726602	0.930414	0.964000	57,726.09	0.525167	30,315.82	467,719.61
39.69	1.00	90,150.69	0.726602	0.923765	0.964000	58,331.54	0.512788	29,911.71	497,631.32
40.69	1.00	91,578.32	0.726602	0.916553	0.964000	58,782.76	0.500701	29,437.69	527,068.92
41.69	1.00	92,857.42	0.726602	0.915658	0.964000	59,568.73	0.488899	29,123.09	556,192.01
42.69	1.00	93,984.79	0.726602	0.910599	0.964000	59,945.71	0.477375	28,616.69	584,808.60
43.69	1.00	94,957.30	0.726602	0.906723	0.964000	60,308.21	0.466123	28,111.04	612,919.63
44.69	1.00	95,771.86	0.726602	0.904714	0.964000	60,690.79	0.455196	27,622.55	640,542.18
45.69	1.00	96,425.34	0.726602	0.893167	0.965000	60,387.57	0.444408	26,836.71	667,378.89
46.69	1.00	96,914.64	0.726602	0.883775	0.965000	60,055.75	0.433933	26,060.15	693,439.04
47.69	1.00	97,236.64	0.726602	0.875479	0.965000	59,689.69	0.423704	25,280.78	718,729.82
48.69	1.00	97,388.23	0.726602	0.858339	0.965000	58,612.32	0.413717	24,248.93	742,978.75
49.69	1.00	97,366.31	0.726602	0.837420	0.965000	57,171.00	0.403965	23,095.11	766,073.86
50.69	1.00	97,167.75	0.726602	0.816120	0.965000	55,603.19	0.394444	21,832.32	788,006.18
51.69	1.00	96,789.45	0.726602	0.793621	0.965000	53,859.79	0.385146	20,743.89	808,750.06
52.69	1.00	96,228.30	0.726602	0.765700	0.965000	51,731.13	0.376068	19,454.41	828,204.47
53.69	1.00	95,481.18	0.726602	0.744434	0.965000	49,838.82	0.367203	18,300.99	846,505.46
54.69	1.00	94,544.98	0.726602	0.720141	0.965000	47,739.70	0.358548	17,116.98	863,622.44
55.69	1.00	93,418.59	0.726602	0.696586	0.963000	45,532.52	0.350097	15,940.79	879,563.22
56.69	1.00	92,092.90	0.726602	0.685774	0.963000	42,901.79	0.341845	14,665.74	894,228.97
57.69	1.00	90,570.79	0.726602	0.629076	0.963000	39,867.01	0.333787	13,307.09	907,536.05
58.69	1.00	88,847.16	0.726602	0.591231	0.963000	36,755.58	0.325919	11,979.35	919,515.40
59.69	1.00	86,918.90	0.726602	0.550965	0.963000	33,508.93	0.318237	10,663.78	930,179.18
60.69	1.00	84,782.88	0.726602	0.513170	0.963000	30,443.34	0.310736	9,459.83	939,639.01
61.69	1.00	82,438.01	0.726602	0.461174	0.963000	26,601.41	0.303411	8,071.17	947,710.18
62.69	1.00	79,875.16	0.726602	0.401826	0.963000	22,463.66	0.296260	6,655.08	954,365.26

Table 6 (continued). Brett S. Lovelace - Present Value of Bachelor Degree Earnings Net Of Personal Maintenance
Worklife - "Expected Value"

Beginning of Year	Fraction of Year	Annual Earnings (Current \$)	Personal Maintenance Factor 27.24%	Survival and Labor Force Participation Factor	Employment Factor	Total Adjusted Net Earnings (Current \$)	2.414008% Present Value	Present Value of Net Earnings (Current \$)	Cumulative Present Value of Net Earnings (Current \$)
63.69	1.00	77,097.23	0.726602	0.347322	0.963000	18,736.74	0.288276	5,420.10	959,785.38
64.69	1.00	74,089.10	0.726602	0.285020	0.963000	15,286.33	0.282458	4,320.57	964,105.93
65.69	1.00	70,877.67	0.726602	0.251099	0.965000	12,478.98	0.276800	3,441.70	967,547.63
66.69	1.00	67,429.82	0.726602	0.228068	0.965000	10,783.03	0.269289	2,903.86	970,451.49
67.69	1.00	63,752.43	0.726602	0.212760	0.965000	9,510.21	0.262952	2,500.73	972,952.21
68.69	1.00	59,842.41	0.726602	0.182485	0.965000	8,077.05	0.256753	2,073.81	975,026.03
69.69	1.00	58,059.23	0.726602	0.182210	0.965000	7,417.85	0.250702	1,859.62	976,885.64
70.69	1.00	58,059.23	0.726602	0.179128	0.965000	7,282.21	0.244782	1,785.08	978,670.72
71.69	1.00	58,059.23	0.726602	0.186393	0.965000	6,773.76	0.238022	1,619.08	980,289.80
72.69	1.00	58,059.23	0.726602	0.157556	0.965000	6,414.02	0.233388	1,488.98	981,788.78
73.69	1.00	58,059.23	0.726602	0.280541	0.965000	10,806.48	0.227887	2,417.07	984,203.83
74.69	1.00	58,059.23	0.726602	0.935630	0.965000	38,086.95	0.222515	8,475.38	992,679.21
75.69	1.00	58,059.23	0.726602	0.759981	0.965000	30,937.58	0.217271	6,721.82	999,401.03
76.69	1.00	58,059.23	0.726602	0.115737	0.965000	4,711.58	0.212149	999.56	1,000,400.69
Avg 18 to 69		77,484.38							
Sum				47.177284					
Age				12.693989					
Worklife				59.871273					

Table 7. Brett S. Lovelace - Summary of Present Values Net of Personal Maintenance

	High School		Some College		Bachelor's Degree	
	Retirement at Age 67 or 70 Earning Capacity	Worklife Expected Value	Retirement at Age 67 or 70 Earning Capacity	Worklife Expected Value	Retirement at Age 67 or 70 Earning Capacity	Worklife Expected Value
Net Earnings						
Age 18 to 67	\$798,348.52		\$855,535.77		\$1,268,983.24	
Age 67 to 70	<u>23,527.42</u>		<u>28,478.00</u>		<u>34,318.91</u>	
Total	\$819,873.94	\$524,638.37	\$882,011.77	\$524,989.22	\$1,303,282.15	\$1,000,400.59

Robert E. "Jay" Marsh, C.P.A., C.F.A., P.E., J.D.
6 Levant Drive
Little Rock, Arkansas 72212-2658
Telephone: (501) 821-6677; Facsimile: (501) 821-6678

Date of Birth: April 16, 1949

Education:

BSEE/BSMA, Norwich University, Northfield, Vermont, 1971
MBA, University of Pennsylvania, Philadelphia, Pennsylvania, 1973
JD, University of Arkansas at Little Rock, Little Rock, Arkansas, 1982
University of Arkansas at Fayetteville, Arkansas, 1989, doctoral courses in economics,
finance and statistics.

Professional Registrations:

Professional Engineer (Electrical Engineering)
Certified Public Accountant
General Securities Principal (formerly)
Chartered Financial Analyst
Attorney at Law

Executive Experience:

Environmental Systems Company, Little Rock, Arkansas
11/81 - 04/89 Board of Directors
01/87 - 04/89 Vice President Business Development
08/82 - 08/85 President, ENSCO, Inc., Chief Operating Officer
03/81 - 08/85 Secretary, Treasurer, Chief Financial Officer

Univest Inc., Little Rock, Arkansas
08/85 - 01/87 President, Chief Executive Officer

Waste Technologies, Inc., (Subsidiary of Stephens), Little Rock, Arkansas
01/80 - 03/81 Vice President Finance, Chief Financial Officer

Arkansas Power & Light, (Subsidiary of Entergy), Little Rock, Arkansas
06/77 - 10/79 Director Treasury & Accounting, Chief Financial Officer

Massey Ferguson Limited, Toronto, Ontario
08/75 - 06/77 Manager Financial Planning - Europe

IU International, Philadelphia, Pennsylvania
05/72 - 08/75 Senior Planning Associate

Expert Economist Experience:

Attorney's Economic Consultants, Little Rock, Arkansas
08/90 - 03/92 Principal

Marsh Economic Consulting, Inc., Little Rock, Arkansas
03/92 - Present President

Prepare economic evaluations. Qualified as an expert witness in economic matters in state or federal courts in
Arkansas, Texas, New Jersey, New York, Oklahoma, Missouri, Kansas and Illinois. Testified in numerous cases.

12/97

Expert Witness Report

*DANIEL LOVELACE and HELEN LOVELACE, Individually, and as Parents
of BRETT LOVELACE, Deceased, vs. PEDIATRIC ANESTHESIOLOGISTS,
P.A.; BABU RAO PAIDIPALLI; and MARK P. CLEMONS*

* * * * *

Prepared by: Jason D. Kennedy, M.D.

**Prepared for: Mark Ledbetter
Halliburton and Ledbetter**



I, Jason D. Kennedy, M.D., declare and state as follows:

I am over the age of 18 and have personal knowledge of the facts stated in this report.

I graduated from the University of Alabama School of Medicine in June 2003. I completed an internship at Carraway Methodist Medical Center in Birmingham, Alabama; a residency in anesthesiology from the University of Alabama at Birmingham Medical Center, Birmingham, Alabama from July 2004 through June 2007; a fellowship in Critical Care Anesthesiology from Emory University Medical Center, Atlanta, Georgia; and, a fellowship in cardio-thoracic Anesthesiology from Emory University Medical Center, Atlanta, GA. I have been a licensed medical doctor in the state of Tennessee with a specialty in Anesthesiology since June 8, 2010, and my Tennessee medical license number is 46094. My qualifications are set forth in my c.v. attached hereto.

I am currently an Assistant Professor of Clinical Anesthesiology at Vanderbilt University in Nashville, Tennessee, and have been in this position from July 2010 to present. Prior to my current position, I was an Instructor in Anesthesiology, Department of Anesthesiology, University of Alabama Birmingham-UAB (Birmingham, AL).

I have reviewed the medical records of Brett Lovelace for the hospitalization of March 12, 2012 through March 14, 2012 from LeBonheur Children's Medical Center. I have also reviewed the following:

- (a) Depositions of the parties;
- (b) Discovery;
- (c) Photographs of Brett Lovelace at LeBonheur; and
- (d) Pleadings.

I am familiar with the applicable standards of care and issues in this case specifically regarding anesthesiology treatment and care, medical, surgical and post-surgical/PACU care, in and for the Memphis area and hospital where the incident occurred,¹ and my opinions are set forth as follows:

¹ I belong to the American Society of Anesthesiologists [ASA] and the Society of Cardiovascular Anesthesiology [SCA], both organizations with physicians practicing in Memphis, Knoxville, Chattanooga, and surrounding areas; I attend meeting[s] of the ASA and SCA where physicians, including anesthesiologists from Memphis, Nashville, Knoxville, Chattanooga and surrounding areas attend; that I have been to Memphis three or four times; that I am familiar with and have worked surgical cases with ENT physicians as well and am familiar with their standard of care in the surgical context as respects the continued need to protect the patient's airway and ventilation and with the safety practices which were not followed in this case, viz., safe positioning, airway patency, supplemental oxygen needed post-surgery and in the PACU; that the communities of Nashville, where I practice, and Memphis are of comparable size; the medical communities adhere to similar practices and rules; there are more than 15 hospitals in Nashville and Memphis; each city has a hospital reported to be among the 100 largest hospitals in

1. I have reviewed the medical records of Brett Lovelace which were provided to the attorney for the Lovelace family for the dates of hospitalization in March of 2012 from LeBonheur Children's Medical Center.

2. Defendants failed to follow the proper standard of care in that they failed to appropriately ensure that Brett was appropriately and safely monitored and assessed in the PACU. There are no records of them assessing the patient in the recovery room until after the initiation of the code, a period of about an hour. Both physicians agreed that such monitoring and assessment was necessary, but neither assured nor verified that proper positioning, proper supplemental oxygen or proper monitoring occurred or was provided.² Anesthesiologist supervision was needed until the patient, Brett Lovelace, was awake and maintaining his own airway.

3. Defendants failed to follow the proper standard of care in that they failed to appropriately ensure that Brett had fully emerged from and recovered appropriately from the anesthetic prior to the removal of the endotracheal tube. Brett's documented tidal volumes prior to extubation were a mere 145-180 cc's, this is a very small tidal volume for an 81 kg child. This, combined with documented hypercarbia, makes it unlikely that he was ventilating adequately at the time of extubation. Brett's high end tidal CO2 level of 56 torr, as recorded on the anesthetic record, support the assertion that appropriate assessment and attention would have prevented his subsequent hypoxemia and acidosis.

4. The Defendants failed to follow standards of care in that they failed to ensure adequate ventilatory support in a patient who was obese, with sleep apnea. Brett's initial arterial blood gas (ABG) is recorded as a pH of 6.70, a partial pressure of CO2 of 96/, a partial pressure of oxygen of PaO2 502/ HC03 of 12. This ABG was performed after at least 10 minutes of positive pressure ventilation, since per the code note, he was reintubated at 1204 and the first blood gas is reported to be at 1218. Therefore, the initial CO2 was likely much higher. There is a sample that is reported to be a venous sample that has a pH of 6.59, a CO2 of >130. This is an incredible amount of hypercarbia resulting likely a prolonged period of hypoventilation as consistent with a patient who was extubated in a non-fully awakened state (deep extubation) and without appropriate insurance that he was maintaining adequate respiratory rate and tidal volumes. This was a clear breach of the standard of care in any patient who had undergone a general anesthetic, and especially true in an obese child with sleep-deprived breathing who undergoes tonsillectomy.

5. Defendants failed to follow the proper standard of care in that they failed to appropriately ensure that Brett had adequate oxygen supplementation in the post-anesthesia care

America, e.g., BMH, Memphis, and VUMC, Nashville; and I have attended CME with Memphis anesthesiologists, e.g., New Horizons in Anesthesiology, and studied and learned the same principles and methods, as well as in medical school.

² See Clinical Practice Guideline: Tonsillectomy in Children, Baugh, et al., Otolaryngology - Head and Neck Surgery 2011 144: S1; Guidelines for Patient Care in Anesthesiology, American Society of Anesthesiologists, October 29, 2011, Section I - III, including post-anesthetic care.

unit (PACU). Defendants failed to reaffirm airway patency and adequacy of breathing. Defendants should have continued delivery of oxygen by mask to Brett Lovelace until his recovery was complete. Further, Defendants failed to maintain airway patency with simple airway maneuvers or oro-nasopharyngeal airway until the patient was fully awake. Neither Defendant could explain these lapses, but both agreed that such steps were required and standard.

6. Defendants failed to follow the proper standard of care in that they failed to appropriately ensure that Brett was appropriately monitored in the post anesthesia care unit. A patient in the prone or knee-chest position is difficult to monitor and ensure adequate oxygenation. Dr. Paidipalli did not attend the patient in the PACU, reportedly and admittedly; and Dr. Clemons did nothing to correct Brett Lovelace's position when he saw him prone and on his face without oxygen support. Placing Brett Lovelace in a left lateral or semi-prone ("tonsil position"), slight head-down position, with a pillow under the chest to allow secretions and blood to drain, was necessary, as well known, but not done, here, which was a failure to follow the pertinent standard of care.³

7. The ENT surgeon failed to follow standards of care in that he failed to appropriately care for and recognize that Brett was not fully awakened from anesthesia. He also failed to appropriately intervene by his lack of any personal action in the care of Brett or by not calling for an appropriate trained anesthesiologist to ensure that Brett was oxygenating and ventilating appropriately. An ENT surgeon routinely cares for such patients and should have known to intervene at the time he saw Brett in the PACU.

8. The ENT surgeon failed to follow standards of care in that he failed to intervene in Brett's poor positioning for a patient who was at high risk of respiratory compromise. By documentation, he saw Brett in the PACU in the knee-chest prone position prior to his arrest, and did not act appropriately to correct the situation.


9. Neither physician appropriately followed up on the possibility of the most likely anesthetic complication and cause of death in patients undergoing T & A – bleeding or loss of airway. Neither arranged for adequate follow-up and evaluation by themselves, a CRNA or the nursing staff. The suggestion that clinical judgment is appropriate for post-anesthetic care in this case is analogous to the judgment that a pilot uses when operating an airplane; however, the judgment of a physician is also based upon instruments similar to those that provide objective information and data to a pilot. For example, in a storm, a pilot must disregard his physical senses and use the instruments to appropriately fly the airplane. By analogy, the anesthesiologist, like the pilot, has to have an objective sense of the standard physiology variables in order to "land the plane" or bring the patient safely out of anesthesia. In this case, clinical judgment is not a proper substitute for failure to pay attention to the details and condition of the patient, and to use customary and accepted safeguards.

10. Neither physician adequately observed the patient in the PACU so as to be able to exercise any judgment whatsoever. The patient was abandoned. It does not appear that either physician advised the PACU nursing staff of the risks of this particular patient. The

³ Guidelines, Difficult Airway Society Guidelines For the Management of Tracheal Extubation., Anesthesia 2012, 67, 318-340, Table 3.

anesthesiologist did not ensure that there was an adequate transfer of care information nor remain with the patient as long as medically necessary nor ensure that the patient was discharged from the PACU unit in accordance with proper anesthesiology policies. The ENT surgeon did no better. See fn. 2, Guidelines for Patient Care in Anesthesiology, *supra*, at III, E, 1-6.

The foregoing opinions are rendered to a reasonable degree of medical certainty; it is further my opinion that the lack of attention and supervision, and failure to follow the appropriate standard of care, directly caused and contributed to the death of 12-year old Brett Lovelace.


Jason D. Kennedy, M.D.

Curriculum Vitae

Name: Jason D. Kennedy
Work Email: jason.d.kennedy@Vanderbilt.Edu

Education

08/1999 - 06/2003 M.D. in Medicine from University of Alabama School of Medicine, Birmingham, AL

Training

1992 - 1999 B.A. from UAB, Birmingham Alabama
07/2003 - 06/2004 Internship from Carraway Methodist Medical Center, Birmingham, AL
07/2004 - 06/2007 Residency in Anesthesiology from University of Alabama at Birmingham Medical Center, Birmingham, AL
07/2008 - 07/2009 Fellowship in Critical Care Anesthesiology from Emory University Medical Center, Atlanta, GA
07/2009 - 07/2010 Fellowship in Cardio-thoracic Anesthesiology from Emory University Medical Center, Atlanta, GA

Licensure and Certification

N/A American Board of Anesthesiology, Diplomate of the ABA of Not Specified
N/A American board of anesthesiology, Specialty certification in Critical Care medicine of Not Specified
2010 - 06/2020 American Board of Echocardiography, Special Competence in Advanced Perioperative Transesophageal Echocardiography (2010-00022268)
06/2010 - 06/2014 Tennessee medical license, Medical License of Tennessee (46094)

Academic Appointments

07/2008 - 07/2009 Instructor in Anesthesiology, Department of Anesthesiology, University of Alabama Birmingham-UAB (Birmingham, Alabama)
07/2010 - Present Assistant Professor of Clinical Anesthesiology, Vanderbilt University (Nashville, Tennessee)

Professional Organizations

American Society Of Anesthesiologist
Society of Cardiovascular Anesthesiologist

Professional Activities

Intramural

10/10 - Present Therapeutic hypothermia, Medicine, Intensive care representative to this group, Physician representative to this group alongwith Dr. Wagner
02/2011 - Present Pharmacy and therapeutics, Pharmacology, represent interest of the Department and the hospital to the P and T committee. Full voting member., Anesthesiology representative
01/2012 - Present ICU Ultrasound, Anesthesiology, Developing standardized ultrasound curriculum for Intensive Care Fellows and Anesthesiology Residents

Teaching Activities

N/A	Hemodynamic Echo monitoring: Assessment of LV and RV function and clinical applicability, Simulation center
05/2010 - Present	Lung Isolation in Thoracic Surgery, Instructor
08/2010 - 2011	Perioperative management of Aortic Dissections, Lecture and Group discussion, Fellows lecture room
08/2010 - 07/2011	Postoperative management of Cardiac surgery patients, lecture and group discussion, Fellows conference room
09/2010 - Present	Echo in the ICU
10/2010 - Present	Neuroprotection and Cardiac Surgery
11/2010 - Present	Modes of Ventilation in the ICU and OR
12/2010 - Present	ICU for Cardiac Surgery
02/2011 - 02/2011	Vasoplegia in the Cardiac operating Rooms, Lecture and group discussion
04/2011 - Present	ICU and Cardiac Surgery
05/2011 - Present	ICU and Cardiac Surgery
10/2011 - Present	ICU for Cardiac Surgery
12/2011 - Present	Lung Isolation in Thoracic Surgery
02/2012 - Present	Pulmonary Hypertension
02/2012 - Present	Vasoplegia in the OR and ICU
02/2012 - 02/2013	Vasoplegia in Cardiac surgery, Lecturer, Monthly lecture on Vasoplegia in CT surgery and Critical Care
09/2012 - Present	Echo Bootcamp for ICU fellows, Course Director, Vanderbilt University, Developed a two day course to accclimate and familirize fellows in the perioperative use of echocardiography and ultrasound for critically ill patients.
12/2012 - 2013	Right Heart Dysfunction in the Operating Room, Lecturer, Lectured for one hour on Right heart failure in the perioperative enviornment
01/2013 - 01/2013	Medical Student UImmersion COurse: Management of valvular disorders, Lecturer, Vanderbilt University, Taught A small group case based one hour lecture on valvular abnormalities

Other Significant Activities

02/2012	Blood conservation in the ICU: Developed evidence based approach to Factor VIIa utilization and product management .This has led to the dramatic reduction in the utilization of Factor VIIa with a costs savings of about half a million dollars in factor VIIa alone.
07/2012	Course director for Critical Care fellows rotation in Ultrasound/echo: Developed syllabus, course and lecture series for ICU fellows to become profecient in the use of Cardiac, thoracic and ocular ultrasound.
11/2012	Extra-Corporeal Life Support Course : Veno-venous ECMO Course for adult Respiratory failure
01/2013	Medical director of Clinical Perfusion- Vanderbilt University: Clinicl Director of Perfusion- Act as a liason for perfusionist and help to develop protoclcs for ECMO and transfusion services for VHVI

Honors / Awards

2003	Alpha Omega Alpha Honor Society
2004	Top Ten Teacher of the Year Award, Department of Anesthesiology UAB

Publications

Non-Peer Reviewed Publications

Abstracts

1. Costello W, Billings F, Bick J, Kennedy J, Wagner C. Transesophageal Echocardiography as a Hemodynamic Monitor in Post Operative Cardiac Surgery Patients. 2011 Oct.

Research Articles

1. Kennedy JD, Sweeney TA, Roberts D, O'Connor RE. Effectiveness of a medical priority dispatch protocol for abdominal pain. 2003 Jan;89-93. PMID: 12540150.

Book Chapters

1. Wagner, Ashby, Kennedy. Anesthesiology: A comprehensive Review for the Written Boards and Recertification Edited by Kai Matthes, Richard Urman, and Jesse Ehrenfeld . 2012 Nov;Chapter 20.

Presentations

Invited Presentation - Regional

1. Tennessee perfusionist society. Nashville, Tennessee. 2011 Sep 24; Colloids vs. Crystalloids in Cardiac surgery.

Internal Grand Rounds

1. Grand Rounds Department of Anesthesiology. Nashville, Tennessee. 2013 Feb 1; Perioperative management of Right Ventricular failure.

Presentations at Scientific Meetings

1. Costello, Bick, Wagner, Billings. ASA-SOCCA, American Society of Anesthesiologist; Chicago, Illinois. 2011 Oct; Transesophageal Echocardiography as a Monitor in Post Operative Cardiac Surgery Patients.